

CLAIMS

I claim:

1. A method for handling operations within a hardware device, comprising:  
providing within the device information regarding the operation, the provided  
information including information identifying the operation;  
selecting at least some of the identifying information of the operation;  
converting at least some of the information regarding the operation based upon the  
selected identifying information; and  
executing the operation based upon the converted information.
2. The method of claim 1, wherein the provided information is within a register of  
the device.
3. The method of claim 1, wherein the identifying information is within a register of  
the device.
4. The method of claim 1, wherein the converted information is within a register of  
the device.
5. The method of claim 1, wherein the step of providing information regarding the  
operation comprises:  
loading operation identifications; and  
generating, based on the operation identifications, a range of operations related to the  
provided information.

6. The method of claim 5, wherein the step of loading operation identifications comprises creating a list of identified operations.

7. The method of claim 5, wherein the operation identifications comprise fields for operation identification, length, attribute and target of each operation.

8. A method for redirecting transactions within a hardware device, wherein transactions occurring within said device contain fields of information regarding the transaction, the method comprising the steps of:

loading all of said fields necessary to identify a transaction into a first register;  
selecting which fields of said first register are to be acted upon;  
converting the transaction information to be redirected through a pre-programmed value for each said field; and  
outputting said new transaction results to a register.

9. The method of claim 8, wherein the step of loading said field necessary to identify a transaction include first loading transaction identifications, then operating on said transaction identifications to generate a range of transactions related to one or more of said fields of information.

10. The method of claim 8, wherein said fields of information are comprised of a field for transaction identification, length, attribute and target of each transaction.

11. A method for redirecting operations within a hardware device, wherein operations occurring within said device contain fields of information regarding the operation and such operations are compared with a preprogramed list of responses and the hardware device

issues responses based on each operation, the method comprising the steps of:  
creating a list of identified operations for which a redirected response is desired;  
comparing each operation with the list of said identified operations; and  
substituting the redirected response for the response from said preprogrammed list of  
responses.

12. The method of claim 11, wherein the step creating a list of identified operations include first loading transaction identifications, then operating on said operation identifications to generate a range of operations related to one or more of said fields of information.

13. The method of claim 11, wherein said fields of information are comprised of a field for transaction identification, length, attribute and target of each transaction.

14. In a data processing system in which a given operation results in a predetermined response, a system for altering such predetermined response comprised of:  
first storage means to identify operations for which a response different from said predetermined response is desired;  
comparator means to compare said given operation with said identified operations;  
second storage means to load a substitute response for said predetermined response;  
and  
selection means to select said substitute response when a given operation meets a predefined criteria for substituting a response from said second register means.

15. The system of claim 14, wherein one or more of said storage means may be selectively enabled or disabled.

16. In a data processing system utilizing a hardware control device in which a given operation results in a predetermined response for that operation, a system for providing a programmable redefinition of allowed instructions and associated responses within said hardware device including:

5 first register means which contains fields to identify preselected operations which may occur within the system;

second register means which operates upon selected fields in the first register means to further define a criteria related to a range of operations for which redirecting a response is desired;

10 comparator means which compares the identified operations with a current operation and selects a substitute value when said identified operation meets a said defined criteria; and

third register means which contain substitute values for all said operations which meet said defined criteria.

15 17. The system of claim 16, wherein one or more of said register means may be selectively enabled or disabled.

18. A data processing system for executing an operation, comprising:

20 an identification store including information identifying at least selected operations;

a comparator responsive to the operation and the identifying information; and

a substitute operation responsive to the comparator and the operation.

25 19. The system of claim 18, wherein the comparator is responsive to a mask of the identifying information.

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20. The system of claim 18, further including a disable signal to prevent operation of the comparator.

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